

## CLAIMS:

1. An electronics assembly which comprises:

(i) a frame;

5 (ii) a motherboard that is removable from the frame;

(iii) one or more daughterboards that extend in a plane generally perpendicular to the plane of the motherboard; and

10 (iv) a plurality of elongate guides for the daughterboards to enable each daughterboard to be moved toward the motherboard into engagement therewith and away from the motherboard out of engagement therefrom;

15 wherein the motherboard has at least one location element thereon, which can engage one of the elongate guides in order to locate the guides and the motherboard with respect to one another.

20 2. An assembly as claimed in claim 1, wherein the motherboard has at least two location elements thereon, each of which can engage one of the elongate guides in order to locate the guides and the motherboard with respect to one another.

3. An assembly as claimed in claim 1, wherein the motherboard can be removed from, or inserted in, the frame by movement in its own plane.

5 4. An assembly as claimed in claim 3, wherein the motherboard is located in a tray-shaped holder that can be slid into and out of the frame.

10 5. An assembly as claimed in claim 2, wherein the or each location element stands up from the printed circuit board forming the motherboard so that it can engage its guide but the guides will allow the motherboard to be removed from, or inserted in, the frame.

15 6. An assembly as claimed in any claim 1, wherein at least one of the guides, which is in a position corresponding to the position of the or each location element on the motherboard, extends toward the plane of the motherboard more than other guides.

20

7. An assembly as claimed in claim 1, wherein the or each location element on the motherboard is in the form of a protuberance that engages a recess in a respective one of the guides.

25

8. An assembly as claimed in claim 1, wherein the motherboard has two location elements thereon, and engagement of one location element on the motherboard with its corresponding guide limits the relative movement of the motherboard and the guides in the insertion direction of the motherboard, and engagement of the other location element and its corresponding guide prevents rotation of the motherboard relative to the guides about an axis normal to the motherboard and passing through the said one location element.

9. An assembly as claimed in claim 1, wherein engagement of one location element on the motherboard with the corresponding guide will prevent relative movement of the motherboard and the guides in two perpendicular directions.

10. An assembly as claimed in claim 1, wherein the motherboard is located within the frame substantially horizontally.

11. An assembly as claimed in claim 10, wherein the motherboard is located within the frame beneath the daughterboards.

12. An assembly as claimed in claim 1, which is located in a cabinet and can be removed therefrom as a single unit.

5 13. A frame for an electronics assembly which comprises:

(i) a location in which a planar motherboard can be received; and

10 (ii) a plurality of guides that extend in a direction generally normal to the plane of the motherboard when it is received in the frame in order to enable a plurality of daughterboards to be located in the frame in engagement with the motherboard, at least one of the guides having a location element  
15 thereon that can engage a corresponding location element on a motherboard in order to locate the guides and the motherboard with respect to one another.

20 14. A frame as claimed in claim 13, wherein at least two of the guides have a location element thereon.

15. A frame as claimed in claim 13, wherein the location for receiving a motherboard allows the motherboard to be  
25 inserted therein in a direction in a plane of the

motherboard.

16. A frame as claimed in claim 13, wherein at least one of the guides extends closer toward the location for receiving the motherboard than the other guides.

17. A frame as claimed in claim 13, wherein the or each location element in the guides comprises a recess that can accommodate a protuberance on the motherboard.

18. A frame as claimed in claim 13, wherein the location for receiving the motherboard will allow the motherboard to be received substantially horizontally.

19. A frame as claimed in claim 16, wherein the location for receiving the motherboard will allow the motherboard to be located within the frame beneath the guides.

20. A method of installing a motherboard in a frame for an electronics assembly comprising a plurality of guides for daughterboards, the guides extending generally normal to the plane of the motherboard, which method comprises:

- (i) sliding the motherboard into the frame; and
- (ii) causing a location element on the motherboard to engage a corresponding location element on at least

one of the guides in order to locate the guides and the motherboard with respect to one another.

21. A method as claimed in claim 20, wherein the motherboard has at least two location elements thereon, and each location element on the motherboard engages a corresponding location element on a different guide.

22. A method as claimed in claim 20, wherein the motherboard is slid into the frame in its own plane.

23. A method as claimed in claim 20, wherein the motherboard is slid into the frame in a horizontal plane.

24. A method as claimed in claim 20, which includes sliding one or more daughterboards toward the motherboard and into engagement therewith.